

CLAIMS

1. A process for fusing a particulate active agent to the surface of a substrate web which comprises:

preparing a mixture of at least one particulate active agent with a particulate binder material having an average particle size not exceeding approximately 40 microns;

applying the mixture to the surface of said substrate to produce a uniform or textured surface of powder covering the substrate web;

heating the powder and substrate to at least the Vicat softening temperature of said binder material but below the melting temperature of the substrate and said active agent ingredients; and

thereafter applying pressure to said coated substrate surface to cause the softened binder material to fuse said particulate active agent particles to each other and to said web substrate surface.

2. The process of claim 1 comprising the additional step of depositing upon said mixture an upper layer of sheet material, whereby said substrate web, powder mixture, and upper layer are simultaneously subjected to said application of pressure.

3. The process of claim 1 wherein said pressure is applied by passing the coated web through the nip of a pair of pressure rollers.

4. The process of claim 2 wherein said pressure is applied by passing the coated web and upper layer through the nip of a pair of pressure rollers.

5. The process of claim 1 wherein said binder material is a synthetic organic polymeric thermoplastic resin.

6. The process of claim 5 wherein said binder material is ethylene-vinyl acetate copolymer.

7. The process of claim 5 wherein said resin is polyethylene.
8. The process of claim 7 wherein said resin is low density polyethylene.
9. The process of claim 7 wherein said resin is high density polyethylene.
10. The process of claim 1 wherein said active agent is carbon.
11. The process of claim 1 wherein said active agent is sodium bicarbonate.
12. The process of claim 11 wherein said active agent comprises activated carbon.
13. The process of claim 1 wherein said active agent is iodated resin.
14. The process of claim 1 wherein said active agent is manganese dioxide.
15. The process of claim 1 wherein said active agent is a liquid absorbent.

16. A first substrate web having a first surface upon which is deposited a particulate iodinated resin and particles of a thermoplastic binder fused to both of said particulate resin and said first surface.

17. The web of claim 16 comprising, in addition, a second substrate web having a second surface spaced from said first substrate web and fused to said thermoplastic binder.

18. A first substrate web having a first surface upon which is deposited particulate carbon and particles of a thermoplastic binder fused to both of said particulate carbon and said first surface.

SubF2)

19. ~~The web of claim 18 comprising, in addition, a second substrate web having a second surface spaced from said first surface and fused to said thermoplastic binder.~~

3 ~~20~~ A first substrate web having a first surface upon which is deposited particulate sodium bicarbonate and particles of a thermoplastic binder fused to both of said particulate sodium bicarbonate and said first surface.

4 ~~21~~ ³ The web of claim ~~20~~ comprising, in addition, a second substrate web having a second surface spaced from said first surface and fused to said thermoplastic binder.

5 ~~22~~ A first substrate web having a first surface upon which is deposited particulate manganese oxide and particles of a thermoplastic binder fused to both of said particulate manganese oxide and said first surface.

6 ~~23~~ ⁵ The web of claim ~~22~~ comprising, in addition, a second substrate web having a second surface spaced from said first surface and fused to said thermoplastic binder.

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24. A first substrate web having a first surface upon which is deposited a particulate liquid absorbent and particles of a thermoplastic binder fused to both of said particulate liquid absorbent and said first surface.

SubF4)

25. ~~The web of claim 24 comprising, in addition, a second substrate web having a second surface spaced from said first surface and fused to said thermoplastic binder.~~

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11